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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,416

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Thomas A. Maufer

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EXAMINER

JACKSON, JENISE E

ART UNIT

PAPER NUMBER

2439

NOTIFICATION DATE

DELIVERY MODE

05/28/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/603,416	Applicant(s) MAUFER ET AL.	
	Examiner JENISE E. JACKSON	Art Unit 2439	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 14, 19, 27, 29, 31, 36-41 and 52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14, 19, 27, 29, 31, 36-41, 52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al(7,274,694).

3. As per claim 1, Cheng et al. discloses a method for network protocol filtering of a packet using an address resolution table that is cross-linked with a state table indexed with an address resolution table index (ART index)(see col. 1, lines 48-51), the packet having a Media Access Control (MAC) destination address, the method comprising: determining a packet type for the packet; obtaining packet information for the packet including the MAC destination address(see col. 2, lines 60-65); determining that the MAC destination address is included in an entry in the address resolution table; obtaining the ART index associated with the MAC destination address from the entry in the address resolution table wherein the ART index is an index into the state table for locating an entry in the state table; and storing the ART index and the packet information in a data structure associated with the state table(see col. 1, lines 52-56, 65-67, col. 2, lines 1-3, col. 3, lines 41-53).

4. As per claim 31, Cheng discloses a method for outbound packet filtering using an address resolution table that is cross-linked with a state table indexed with an address resolution table index (ART index), the packet having a Media Access Control (MAC) destination address, the method

comprising: obtaining a packet; determining whether an incoming interface for the packet is running network address translation; if the incoming interface is running the network address translation (see col. 1, lines 48-56, 65-67, col. 2, lines 1-3, 60-65, col. 3, lines 41-53).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-9, 14, 19, 27, 29, 36-41, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al(7,274,694) in view of Goldberg(2004/0013112).

7. As per claim 2, Cheng discloses an address resolution table(see col. 3, lines 41-53). Cheng does not disclose; however, Goldberg discloses determining whether the packet is for a new connection; and responsive to the packet not being for the new connection, determining whether the packet information is in the table[0009-0010, 0048]. It would have been obvious to one of ordinary skill at the time of the invention to include determining whether the packet is for a new connection of Goldberg with Cheng, the motivation is that when new sessions are detected, created and data related thereto is stored in a session database. An attempt is made to recognize each received packet and associate it with a previously opened session. Recognition of a session is accelerated by use of a hash table to quickly determine the corresponding session record in the session database[0009 of Goldberg].

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8. As per claim 3, Cheng is silent on; however, Goldberg discloses wherein the packet type is a Transmission Control Protocol type[0055]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a packet type that is TC of Goldberg with Cheng; the motivation is that TCP provides reliable, ordered delivery of a stream of bytes[0055].

9. As per claim 4, Cheng is silent on; however, Goldberg discloses wherein the packet type is a User Datagram Protocol type[0055]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a packet type is a UDP of Goldberg with Cheng, the motivation is that UDP is a simple transmission without implicit handshaking for guaranteeing reliability, ordering, or data integrity[0055].

10. As per claims 5, 36, Cheng is silent on; however, Goldberg discloses wherein the packet information is a five-tuple including source and destination addresses, source and destination ports, and a packet type identifier [0055]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a five-tuple of Goldberg with Cheng, the motivation is that five-tuple lookups are the basis of access control lists and are an effective means of classification[0055].

11. As per claims 6, 37, Cheng is silent on; however, Goldberg discloses wherein the packet type is a Generic Routing Encapsulation type[0055, 0130]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a packet type is a Generic Routing Encapsulation type of Goldberg with Cheng, the motivation is using Generic Routing Encapsulation is a tunneling protocol that can encapsulate a variety of packets[0055, 0130].

12. Same Motivation as claim 5. As per claims 7, 38, Cheng is silent on; however, Goldberg discloses wherein the packet information is a five-tuple including source and destination addresses, an apportioned Generic Routing Encapsulation identifier, and a packet type identifier[0055, 0085].

13. As per claims 8, 39, Cheng is silent on; however, Goldberg discloses herein the packet type is an Internet Protocol Security type[0055-0056]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include an Internet Protocol Security type of Goldberg with Cheng, the motivation is that securing IP communication by authenticating and encrypting each IP packet of a data stream[0055-0056].

14. Same Motivation as claim 5. As per claims 9, 40, Cheng is silent on; however, Goldberg discloses wherein the packet information is a five-tuple including source and destination addresses, an apportioned security parameter string, and a packet type identifier [0009, 0055].

15. As per claim 14, Cheng discloses a method for inbound network address translation packet filtering using an address resolution table that is cross-linked with a state table indexed with an address resolution table index (ART index), the packet having a Media Access Control (MAC) destination address, obtaining packet information from the packet including the MAC destination address; determining that the MAC destination address is included in the address resolution table; obtaining the ART index associated with the MAC destination address from the entry in based on the address resolution table, wherein the ART index -is an index into the state table for locating an entry in the state table; and storing the ART index and the product information in the data structure associated with the state table(see col. 1, lines 48-56, 65-67, col. 2, lines 1-3, 60-65, col. 3, lines 41-53).. Cheng is silent on; however, Goldberg discloses obtaining a packet; determining whether type of the

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packet is one of a Transmission Control Protocol, if the type is the Transmission Control Protocol type, determining if the packet is an initial packet for a connection[0009-0010, 0048, 0055]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include TCP of Goldberg with Cheng, the motivation is that TCP provides reliable, ordered delivery of a stream of bytes[0055].

16. As per claims 19, 41, Cheng is silent on; however, Goldberg discloses checking validity of layers of the packet; checking Internet Protocol options for the packet; and determining whether the packet is a fragment[0055-0056]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include checking the validity of the packet of Goldberg with Cheng, to track the session state and verify its legality[0056].

17. As per claims 27, 52, Cheng is silent on; however, Goldberg discloses wherein the data structure is for a plurality of canonical frame headers[0061]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a canonical frame header of Goldberg with Cheng, the motivation is that the session related data and parameters is stored in the session database. A hash pointer to the new session is then calculated and stored in the hash table[0061].

18. As per claim 29, Cheng is silent on; however, Goldberg discloses wherein the state table is a connection table[0048]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a connection table of Goldberg with Cheng, the motivation is to maintain a connection table referred to as a session database for monitoring the state of a communications session[0048].

Response to Applicant

19. The Applicant's terminal disclaimer was not approved, because the POA filed 9/18/06 list Gendaq as the assignee. Correction is required in order for terminal disclaimer to be approved.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENISE E. JACKSON whose telephone number is (571)272-3791. The examiner can normally be reached on Increased Flex time, but generally in the office M-Fri(8-4:30)..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 22, 2010
/J. E. J/
Examiner, Art Unit 2439

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/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2439